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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CHEVALIER, ALICIA ANN	
ART UNIT	PAPER NUMBER
1772	11

DATE MAILED: 04/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/926,099	SHIZUNO ET AL.	
	Examin r	Art Unit	
	Alicia Chevalier	1772	

-- The MAILING DATE f this communication appears n the c ver sheet with the c rrespondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 March 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) *6-8* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,9 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3,4,6,7* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-5, 9 and 10, in Paper No. 10 is acknowledged. The traversal is on the ground(s) that since Group II depends on Group I these groups clearly share a common special technical feature.. This is not found persuasive because since the present application was filed on the national stage under 35 USC 371, the propriety of a restriction requirement or "unity of invention" is evaluated by the criterion stated in PCT Rule 13 (or, alternatively, in 37 CFR 1.475(a)), namely, unity of invention exists between multiple inventions only when these inventions share one or more "special technical features" in common with the understanding that these special technical features define a contribution which each of the invention makes over the prior art. Since the special technical feature of claim 1, the bulky sheet, does not define a contribution over the prior art, as shown by Suzuki et al. (4,718,152) and further evidenced in the other 35 U.S.C. 102 rejections of record, restriction is proper.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (4,718,152).

Suzuki discloses a bulky sheet comprising a fiber aggregate of a fiber web. The bulky sheet having a number of projections and depressions comprising the fiber aggregate. The projections and depressions retaining the shape by themselves. The fibrous web having a basis weight of 15 to 100 g/m^2. See the summary of the invention and figures 10-13.

The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitations formed by water needling and formed both by rearrangement of the constituting fibers of said fiber aggregate by water needling of said fiber aggregate and by the multiple bending manner of said fiber aggregate

along the thickness direction thereof are methods of production and therefore does not determine the patentability of the product itself.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Shizuno et al. (5;525,397).

Shizuno discloses a bulky sheet (cleaning sheet) comprising a fiber aggregate of a fiber web and a network sheet. The bulky sheet having a number of projections and depressions, which retain the shape by themselves, comprising the fiber aggregate. The constituting fibers of the fiber aggregate are further bonded to the network sheet thereby forming a unitary body. See figures 1 and 2. The basis weight of the nonwoven fiber aggregate falls within the range of 40 to 100 g/m^2 (col. 4, lines 11-12).

The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946,

966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitations formed by water needling and formed both by rearrangement of the constituting fibers of said fiber aggregate by water needling of said fiber aggregate and by the multiple bending manner of said fiber aggregate along the thickness direction thereof are methods of production and therefore does not determine the patentability of the product itself.

5. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Murase et al. (5,718,972).

Murase discloses a bulky sheet (cleaning sheet) comprising a fiber aggregate of a fiber web. The bulky sheet having a number of projections and depressions, which retain the shape by themselves, comprising the fiber aggregate. See figure 7. The basis weight of fiber aggregate falls within the range of 10 to 250 g/m^2 and has a fineness of 2-12 denier (2.2-13.3 dtex). If the fineness is more than 12 denier, the filaments are excessively thick, and it becomes difficult to obtain a web of good appearance/softness/feel at a low weight. See column 5, lines 19-22 and column 8 , line 65 to column 9, line 2.

The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitations formed by water needling and formed both by rearrangement of the constituting fibers of said fiber aggregate by water needling of said fiber aggregate and by the multiple bending manner of said fiber aggregate along the thickness direction thereof are methods of production and therefore does not determine the patentability of the product itself.

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeuchi et al. (5,958,555).

Takeuchi discloses a bulky sheet (cleaning sheet) comprising a fiber aggregate of a fiber web and a network sheet. The bulky sheet having a number of projections and depressions, which retain the shape by themselves, comprising the fiber aggregate. The constituting fibers of the fiber aggregate are further bonded to the network sheet thereby forming a unitary body. See figure 1. The basis weight of the nonwoven fiber aggregate falls within the range of 15 to 75 g/m^2 (col. 3, lines 49-60). The sheet has an apparent thickness relatively as large as 2.43 mm, so that the sheet is wholly bulky. The projections and depressions are formed at an appropriate extent so the sheet can effectively work for wiping off dust and fluff pulp (col. 13, lines 44-52 and table 1).

The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be

either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974). This burden is NOT discharged solely because the product was derived from a process not known to the prior art. *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Furthermore, the determination of patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitations formed by water needling and formed both by rearrangement of the constituting fibers of said fiber aggregate by water needling of said fiber aggregate and by the multiple bending manner of said fiber aggregate along the thickness direction thereof are methods of production and therefore does not determine the patentability of the product itself.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuno et al. (5,525,397) in view of Takeuchi et al. (5,958,555).

Shizuno discloses all the limitations of the instant claimed invention except for the apparent thickness and apparent volume.

Takeuchi discloses a bulky sheet (cleaning sheet) comprising a fiber aggregate of a fiber web and a network sheet. The bulky sheet having a number of projections and depressions, which retain the shape by themselves, comprising the fiber aggregate. The constituting fibers of the fiber aggregate are further bonded to the network sheet thereby forming a unitary body. See figure 1. The basis weight of the nonwoven fiber aggregate falls within the range of 15 to 75 g/m^2 (col. 3, lines 49-60). The sheet has an apparent thickness relatively as large as 2.43 mm, so that the sheet is wholly bulky. The projections and depressions are formed at an appropriate extent so the sheet can effectively work for wiping off dust and fluff pulp (col. 13, lines 44-52 and table 1).

The exact apparent thickness and apparent volume of the sheet is deemed to be a cause effective variable with regard to the bulkiness of the sheet. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as apparent thickness and apparent volume of the sheet through routine experimentation in the absence of a showing of criticality in the claimed combined thickness. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art at the time of the invention would have been motivated by the disclosure of Takeuchi to optimize the apparent thickness and apparent volume of the

Shizuno's sheet in order to optimize the bulkiness of the sheet to improve the effectiveness of the wipe at removing dust and other things.

9. Claims 4, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuno et al. (5,525,397).

Shizuno discloses all the limitations of the instant claimed invention except for having an elongation of 5% or less in the machine direction thereof measured under the condition of 5N/30mm, the network sheet has a heat shrinkage of 3% or less as measured under 140 for 3 minutes, or having a breaking strength of at least 5 N at the width of the specimen of 30mm.

Shizuno further discloses that that it is important for the cleaning sheet in accordance with the present invention, which comprises the network sheet and the fiber aggregate, that the breaking strength of the cleaning sheet is 500g/30mm or more, preferably 1000g/30mm or more, that the elongation at a load of 500g/30mm is 10% or less, preferably 7% or less. If the breaking strength of the cleaning sheet is lower than 500g/30mm, the cleaning sheet will tend to break during the cleaning operation. The elongation of the cleaning sheet is preferably as low as possible. If the elongation of the cleaning sheet as a load of 500g/30mm is greater than 10% distortion or twisting of the cleaning sheet will occur during the cleaning operation, and therefore the cleaning sheet will become inconvenient to handle.

It has been held that where claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established and the burden of proof is shifted to applicant to show that prior art products do not necessarily or inherently possess characteristics of claimed products where the rejection is based on inherency

under 35 USC 102 or on *prima facie* obviousness under 35 USC 103, jointly or alternatively. Therefore, the *prime facie* case can be rebutted by ***evidence*** showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

In the instant case, Shizuno discloses a similar elongation and breaking strength.

Therefore, in addition to the above disclosed limitations, the presently claimed properties of elongation of 5% or less in the machine direction thereof measured under the condition of 5N/30mm, a heat shrinkage of 3% or less as measured under 140 for 3 minutes, or a breaking strength of at least 5 N at the width of the specimen of 30 mm would have necessarily been present because Shizuno discloses the same material structure (i.e. bulky sheet comprising a fiber aggregate of a fiber web and a network sheet), and there is no evidence currently of record showing that the disclosed prior art products do not necessarily possess the characteristics of the claimed product.

Alternatively, if the elongation and the breaking strength would not have necessarily been present in Shizuno, it would have been obvious to optimize them to the claimed values. The exact elongation and the breaking strength of the sheet is deemed to be a cause effective variable with regard to the strength of the sheet. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as elongation and the breaking strength of the sheet through routine experimentation in the absence of a

showing of criticality in the claimed combined thickness. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art at the time of the invention would have been motivated to optimize the values to improve the strength of the sheet to prevent the sheet from breaking, distorting, twisting, etc., as taught by Shizuno.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shizuno et al. (5,525,397) in view of Murase et al. (5,718,972).

Shizuno discloses all the limitations of the instant claimed invention except for the fineness of the sheet being of 5 dtex or less.

Murase discloses a bulky sheet (cleaning sheet) comprising a fiber aggregate of a fiber web. The bulky sheet having a number of projections and depressions, which retain the shape by themselves, comprising the fiber aggregate. See figure 7. The basis weight of fiber aggregate falls within the range of 10 to 250 g/m^2 and has a fineness of 2-12 denier (2.2-13.3 dtex). If the fineness is more than 12 denier, the filaments are excessively thick, and it becomes difficult to obtain a web of good appearance/softness/feel at a low weight. See column 5, lines 19-22 and column 8 , line 65 to column 9, line 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use fibers with fineness of 5 dtex or less as the fibers in Shizuno as taught by Murase because a finer fiber would give the sheet a better appearance/softness/feel at a low weight.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Harold Pyon can be reached by dialing (703) 308-4251. The fax phone number for the organization official non-final papers is (703) 872-9310. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac

4/15/03

HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

4/17/03